

DRAWING AMENDMENTS

Please replace sheet 3 containing drawings 3A, 3B, "C" and 4 with the replacement drawing sheet attached hereto.

REMARKS

This Amendment addresses the issues raised by the Examiner in the Office Action mailed February 18, 2005. Initially, Applicants would like to thank the Examiner for the careful consideration given this case and for indicating allowable subject matter in Claims 7-13. In view of the above amendments and the following remarks, Applicants feel that all outstanding issues have been addressed and prompt allowance of all remaining claims is respectfully requested.

Allowable Subject Matter

The Examiner indicated allowable subject matter in Claims 7-13 and requested that Applicants rewrite Claim 7 in independent form. Through the above amendments, Claim 7 has been rewritten to include all elements of its base claim and all intervening dependent claims. Based on the indication of allowable subject matter, Claims 7-13 are now in condition for final allowance, and notice to such effect is respectfully requested.

Specification Objections

The Examiner first objected to the specification because of the informality: "jumper strap 215" should be written as --jumper block 215--. Applicants reviewed the specification and believe the Examiner's suggested change is not correct. Instead, in paragraph [47] at line 12, the phrase "jumper straps 215" should be changed to --jumper straps 210--.

The Examiner also objected to the phrases "a first [second, third, fourth] conductive layer" and "a first [second] dielectric layer" related to the mechanical-electrical connector for interconnecting successive loops of a sectioned stator. In the context of the claims, these various layers are claimed in a specific order and are electrically connected to each other via "conductor jumpers" and a

mechanical bolt. The Examiner suggests that these terms lack “antecedent basis” in the specification. In fact, the Examiner misquotes the pertinent standard, as it is “clear support” (and not strict “antecedent basis”) that is required for claim terms with respect to the specification (see 37 CFR 1.75(d)(1)).

Under either standard, contrary to the Examiner’s suggestion, the entire specification discusses just the type of layered bolted connector that is claimed in Claim 14. For example, Figs. 10 and 11 and the discussion of these figures clearly shows the conductive layers 205 interspersed with dielectric layers 230 precisely as stated in the objected-to Claim 14. The interconnecting jumpers (e.g., straps 210) and the bolt 220 are also clearly shown. Moreover, other parts of the specification, such as paragraph [49] clearly describe the conductive layers 205 separated by dielectric spacers 230. The Examiner’s objection to these claim terms is clearly improper as there is more than sufficient “clear support” for these claim terms.

Drawings

The Examiner also objected to Fig. 3C as mistakenly omitting the “3” designation. This typographical error has been corrected through the attached drawing correction replacement sheet for Fig. 3 (which also includes Fig. 4). As this error was clearly ministerial in nature, no new matter is being injected into this prosecution.

Claim Rejections § 112

Again, Examiner re-asserted an object to the “layered” language of Claim 14 (and claims that depend therefrom). As discussed above, these claims find full support in the specification and are clear on their face. No change to these claims is necessary given this guidance. The Examiner concludes his discussion by stating that “in light of the specification, the Examiner interprets the limitation as

‘four conductive layers are arranged between dielectric layers.’” In reality, it is not the Examiner’s prerogative to “rewrite” claims for no reason.

The claimed conductive and dielectric layers were not claimed in a vacuum, without any relationship to each other. In fact, Claim 14 clearly states that there is a first conductive layer with a first dielectric layer below the first conductive layer and a second conductive layer below the first dielectric layer. As clearly claimed, these three layers make a “sandwich” of a dielectric layer between two conductive layers as shown, for example, in Fig. 11. In the same way, the claimed third and fourth conductive layers sandwich a second dielectric layer. Additionally, these two groups of “sandwiched” layers are then connected through an inner conductor (which sits between the third and fourth conductive layers – the layer at the bottom of the first “sandwich” and at the top of the second “sandwich” as clearly shown in Fig. 11). An outer conductor then connects the remaining two conductive layers (the upper layer in the first “sandwich” and the lower layer in the second “sandwich”). There can be no dispute or ambiguity about the alternating layers of Claim 14 (and the dependent claims thereto).

Claim Rejections § 102

The Examiner rejected Claims 1, 2 and 4 under 35 U.S.C. 102(b) as being anticipated by U.S. Patent No. 4,635,350 to Olsen (“Olsen”). The Examiner then attempts to read Olsen on the rejected claims. Although Olsen teaches certain aspects that are similar to the present invention, it does not teach or suggest all of the elements of the rejected Claims 1, 2 and 4, as amended by the above amendments.

Olsen is directed to a multi-layer armature winding for large turbine generators with individual diamond coils wound up to the proximity of a connection point (*see* Olsen Abstract). At this juncture, “individual bar coils” are laid in the lower and upper portions of the stator slots which are then “electrically

interconnected by suitable electrical joints, collectively indicated at 62, which may take the form of straps 64 welded or brazed to their butt ends (see Olsen at col. 4, lines 59-62). Olsen, however, does not teach the all-inclusive bolted connector of the present invention which provides a simple and repeatable connection/termination both electrically and mechanically, all in one package.

Although the Examiner's reading of Olsen is overly broad, in an effort to move the present prosecution forward, Applicants have amended Claim 1 by incorporating the substantive limitations of Claims 2 and 4 into Claim 1 and by clarifying that the first and second mechanical-electrical connectors must each be single units that perform all of the stated electrical and mechanical connections. Clearly, the simple (and separate) electrical welds between the upper and lower conductors of Olsen does not teach or suggest the claimed invention of amended Claim 1.

Specifically, Claim 1 now defines each of the first and second connectors as including a plurality of conductive layers separated by at least one physical dielectric layer (which electrically and mechanically separates the conductive layers). Clearly, the "air" cited by the Examiner with respect to Olsen does not teach this limitation. Further, an insulating boot is claimed as encasing each of the first and second connectors. Again, Olsen does not teach this aspect of amended Claim 1.

Claims 2 and 4 have been cancelled without prejudice as the substance of these claims has been moved up into Claim 1.

The Examiner also rejected Claims 14-19 under 35 U.S.C. 102(b) as being anticipated by U.S. Patent No. 5,261,830 to Jago ("Jago"). The Examiner begins his discussion by stating that "Fig. 1 shows four conductive layers 52 are arranged between dielectric layers 53." In fact, a review of Fig. 1 of Jago shows that there is no reference numeral 52 in Fig. 1 at all. Moreover, a review of the

specification states that in other figures, reference numeral 52 represents a “splicing pad” and not a conductive layer as asserted by the Examiner. It is therefore impossible to judge the Examiner’s arguments on their face because they do not accurately describe Jego at all.

However, Applicants are able to easily distinguish Jego from the present claims. Jego is a simple serial connector used to connect various stranded to each other. The present invention is directed to a stacked bolted connector, in which two “sandwiches” of conductor/dielectric/conductor layers are connected in-line by an inner conductor and the outer conductors are connected via an outer conductive jumper. Claim 14 very clearly states each of these attributes (as described fully above), and Jego does not teach this type of connector. For example, Jego does not have to two claimed sandwiches of conductor/dielectric/conductor layers as claimed in Claim 14. Jego does not have the “inner conductor” that connects the lower conductive layer from the first “sandwich” to the upper conductive layer of the second “sandwich” of Claim 14. Jego also does not have the “outer conductive jumper” that connects the upper conductive layer of the first “sandwich” to the lower conductive layer of the second “sandwich.”

Regarding the dependent claims, Jego also does not teach the grooved conductive tip acceptors (claim 16), the phase lead (Claim 16), the bolt insulator tube (Claim 18) and the insulating boot (Claim 19).

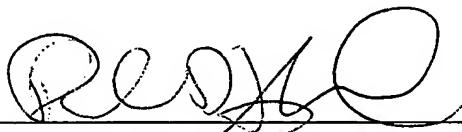
Claim Rejections § 103(a)

The Examiner also suggests several combinations of “obviousness” rejections for certain dependent claims. However, in view of the above amendments and remarks related to the independent claims, it is clear that no combination of these or other references could render the claims of the present invention, as amended, obvious in light of the prior art.

The above claim amendments and accompanying remarks address each and every concern raised by the Examiner in the Office Action. Applicants believe that all remaining claims of the present invention are now in condition for final allowance. If the Examiner feels that any issues remain outstanding, the Examiner is encouraged to contact Applicant's attorney at the contact information below.

Respectfully submitted,

Dated: May 18, 2005

By 
Robert D. Kucner
Reg. No. 45,908

REED SMITH LLP
P.O. Box 488
Pittsburgh, PA 15230
(412) 288-4598

Attorney for Applicants